CLAIMS:

1. A teletext decoder page memory (6), comprising: a memory configuration including a first memory section (6a), a second memory section (6b) and a third memory section (6c), each of said first, second and third memory sections being comprised of a plurality of memory storage positions, the first memory section (6a) is used for storing a first subpage $N_1$of a user requested page N and also for storing sequentially higher order pages (N+1, N+2,..., N+J) of said user requested page N, the second memory section (6b) is used primarily for storing sub-pages (N_2, N_3,.. N_i) of said user requested page N; and the third memory section (6c) for storing the K most recently requested teletext pages by the user;

wherein the second memory section (6b) may also be used for storing additional sequentially higher order pages (N+(J+1)), (N+(J+2)) of said requested page N when it is determined that the second memory section (6c) has at least one unused memory storage position available subsequent to storing said sub-pages (N_2, N_3,.. N_i) of said user requested page N.

2. The teletext decoder of Claim 1, wherein said second memory section (6b) stores additional sequentially higher order pages (N+(J+1)), (N+(J+2)) of said requested page N which follow in sequential order from the highest sequentially higher order page stored in said first memory section (6a).

3. The teletext decoder of Claim 1, wherein said second memory section (6b) stores additional sequentially higher order pages (N+(J+1)), (N+(J+2)) of said requested page N in direct proportion to the number of unused memory storage positions available.

4. The teletext decoder page memory of Claim 1, wherein the first memory section (6a) is a sequential memory (6a) for storing the first subpage $N_1$of said requested page N and sequentially higher order pages (N+1, N+2,..., N+J)of said requested page N in one of a television mode and a teletext mode.

5. The teletext decoder page memory of Claim 1, wherein the second memory

section (6b) is a sub-page memory (6b) for storing the second through Nth sub-page of said requested page N and for storing sequentially further higher order pages (N+(J+1)), (N+(J+2)) of said requested page N, wherein said further higher order pages follow in sequential order from the highest order page stored in the sequential memory (6a).

6. The teletext decoder page memory of Claim 1, further comprising: a non-volatile memory (9), the non-volatile memory (9) configured to store (K+1) page numbers, wherein said (K+1) page numbers include one of a page number of a last viewed teletext page and the page numbers of the K most recently requested teletext pages stored in the third memory section (6c).

7 The teletext decoder page memory of Claim 6 wherein the page number of a last viewed teletext page is one of a page number of a last viewed page in a television mode and a page number of a currently viewed teletext page in a teletext mode.

8. A method for smartly caching teletext pages in a teletext decoder page memory comprised of at least a first memory section, a second memory section and a third memory section, the method comprising the acts of:

storing a first sub-page of a user requested page N in the first memory section (6a);

storing sequentially higher order pages (N+1, N+2, ...N+J) of said user requested page N in the first memory section (6a);

storing sub-pages (N_2, N_3, N_4, .., Ni) of the user requested page N in a second memory section (6b);

determining if the second memory section (6b) has at least one unused memory storage position; and

using the at least one unused memory storage position of the second memory section (6b) to store additional higher order pages (N+(J+1), N+(J+2),...) of said requested page N.

9. The method of Claim 8, wherein the act of storing a first sub-page of a user requested page N in the first memory section (6a) further comprises the acts of:

purging the contents of the memory storage cells of the first memory section (6a);

determining if a first sub-page N_1 of the user requested page N is previously stored in the third memory section (6c);

if said determining act is true:

a) retrieving the first sub-page N_1 from the third memory section (6c);

b) storing the first sub-page N_1 in the first storage position of the first memory section (6a);

c) displaying the first sub-page N_1 to the user;

d) shifting all teletext pages preceding the first sub-page N_1 in the third memory section (6c) to the right in FIFO like manner; and

e) storing the page corresponding to a previous user request at the first memory storage position of the third memory section (6c);

if said determining act is not true downloading a first sub-page N_1 of the user requested page N.

10. The method of Claim 8, further comprising the acts of:

shifting all page numbers preceding the page number of the requested page N to the right in a non-volatile memory (9) in FIFO like manner; and

storing the page number associated with the user requested page N in a first storage memory storage position of the non-volatile memory (9).

11. The method of Claim 8, wherein the act of storing sub-pages of the user requested page in a second memory section (6b) further comprises the acts of:

determining if the user requested page N consists of multiple sub-pages (N_1, N_2,.., Ni, N_{i+1}); and

if said determining act is true, performing the act of downloading the multiple sub-pages (N_2,.., Ni, N_{i+1}) of the requested page N.